Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in this application.

Listing of Claims:

1. (Cancelled)

2. (Currently amended) The method claimed in claim [[1]] 59, wherein the customization information for the first individual user or the second individual user further includes at least one of a user profile or a rendering intent subject to a predetermined task choice or skill level.

3-6. (Canceled)

7. (Currently amended) The method claimed in claim [[1]] 59, wherein the step of ~~determining~~ obtaining the scene disparity map includes obtaining a scene convergence point and depth information from the 3D computer graphics model.

8. (Canceled)

9. (Currently amended) The method claimed in claim [[1]] 59, wherein the step of generating [[a]] the first customized disparity map or the second customized disparity map ~~further~~ includes applying a predetermined mapping function to modify the scene disparity map.

10. (Original) The method claimed in claim 9, wherein the predetermined mapping function is dependent on a region of interest.

11. (Original) The method claimed in claim 10, wherein the region of interest is dynamic.

12-14. (Cancelled)

15. (Currently amended) The method claimed in claim [[1]] 59, wherein the step of generating the first customized disparity map or the second customized disparity map is accomplished by applying a linear transformation to the corresponding first scene disparity map or second scene disparity map.

16. (Currently amended) The method claimed in claim [[1]] 59, wherein the step of generating the first customized disparity map or the second customized disparity map is accomplished by applying a non-linear transformation to the corresponding first scene disparity map or second scene disparity map.

17-18. (Cancelled)

19. (Original) The method claimed in claim 10 wherein the region of interest is based upon a measurement of fixation position.

20. (Original) The method claimed in claim 10, wherein the region of interest is based upon a map of probable fixations.

21. (Cancelled)

22. (Currently amended) The method claimed in claim [[1]] 59, wherein the step of generating the first customized rendering conditions or the second customized rendering conditions ~~for a three-dimensional (3D) computer graphic model~~ includes computing a location, an orientation, a focal distance, a magnification and a depth of field correlating to a pair of simulated cameras.

23. (Currently amended) The method claimed in claim [[1]] 59, wherein the first customized rendering conditions or the second customized rendering conditions are generated by modifying one or more of a set of correlating camera parameters including camera location, orientation, focal distance, magnification or depth of field.

24. (Withdrawn) A method for determining an aim disparity range for stereoscopic imaging, comprising the steps of:

a) obtaining a stereoscopic display user's identifier;

b) determining whether the stereoscopic display user has a user profile;

c) retrieving a found user profile for the stereoscopic display user;

d) creating the user profile where no existing user profile is found;

e) obtaining rendering intent correlating to the stereoscopic display user; and

f) calculating the aim disparity range subject to above steps.

25. (Withdrawn) The method for determining an aim disparity range as claimed in claim 24, further comprising the step of assigning values for skill level (Cs) of the stereoscopic display user and type of tasks (Ct) that the stereoscopic display user will perform.

26. (Withdrawn) The method for determining an aim disparity range as claimed in claim 24, further comprising the step of assigning a value, as an adaptive factor, Ca, for compensating for a dynamic viewing experience subject to the stereoscopic display user.

27. (Withdrawn) The method claimed in claim 24, wherein the user profile is created from the group consisting of on-display assessment, stored optometric data, and a default user profile.

28. (Withdrawn) The method claimed in claim 27, wherein the on-display assessment includes manipulating one or more test stimuli shown in a user interface for adjusting disparity between at least one target and the stereoscopic display user.

29. (Withdrawn) The method claimed in claim 27, wherein the on-display assessment includes automatic manipulation of one or more test

stimuli shown in a user interface for adjusting disparity between at least one target and the stereoscopic display user.

30. (Withdrawn) The method claimed in claim 27, wherein creating the user profile includes the step of obtaining optometric parameters for a set of accommodation planes as the stored optometric data.

31. (Withdrawn) The method claimed in claim 30, wherein the step of obtaining optometric parameters includes selecting from the group consisting of inter-pupillary distance, near and distant testing distances, near and distant phoria, and near and distant fusional reserves.

32. (Withdrawn) The method claimed in claim 27, wherein the default user profile is determined using an optometric model.

33. (Withdrawn) The method claimed in claim 27, wherein the default user profile is determined using interpolation of a set of statistical data from an optometric assessment of the user population.

34. (Withdrawn) The method claimed in claim 30, further comprising the steps of:

a) generalizing the optometric parameters for a different set of accommodation planes;

b) calculating optometric parameters for a single accommodation plane of display;

c) obtaining comfort values for a user's fusing capability; and

d) determining the aim disparity range based on the optometric parameters and above steps.

35-43. (Cancelled)

44. (Withdrawn) A user interface for obtaining the stereoscopic capabilities of a user, comprising:

one or more objects of known visual disparity displayed by the user interface.

45. (Withdrawn) The user interface in claim 44, wherein the user indicates their comfort when viewing the object.

46. (Withdrawn) The user interface in claim 44, wherein the user controls the known visual disparity of the one or more objects and indicates when they are unable to fuse one or more of the objects.

47. (Withdrawn) The user interface in claim 44, wherein the known visual disparity of the one or more objects is automatically updated and indicates to the user when the user is or is not able to fuse one or more of the objects.

48. (Withdrawn) The user interface in claim 44, wherein a series of objects of known visual disparity is displayed and the user indicates which of these the user is or is not able to fuse.

49. (Withdrawn) The user interface in claim 44, wherein an accommodation distance for one or more of the objects is different than an accommodation distance for one or more additional objects.

50. (Withdrawn) A software product capable of determining a range of stereo disparities that a user can fuse.

51. (Withdrawn) The software product as claimed in claim 50 capable of modifying rendering parameters within a computer application.

52. (Withdrawn) The software product as claimed in claim 51 capable of modifying the rendering parameters within a graphics rendering card.

53-57. (Cancelled)

58. (Currently amended) The method of claim [[1]] 59 wherein the stereoscopic disparity range for the first individual user or the second individual user is characterized by a user-specific crossed disparity upper limit and a user-specific uncrossed disparity upper limit, and wherein the crossed displarity upper limit corresponds to the image disparity for the closest apparent object distance that can be comfortably viewed by the individual user in a stereoscopic image viewed on the stereoscopic display device, and the user-specific uncrossed disparity upper limit corresponds to the image disparity for the farthest apparent object distance that can be comfortably viewed by the individual user in a stereoscopic image viewed on the stereoscopic display device.

59. (Currently amended) A method for producing pairs of stereo images customized for individual users from an input stereoscopic image, comprising the steps of:

a) obtaining customization information including a first stereoscopic disparity range for a first individual user, wherein the stereoscopic disparity range for the first individual user is the range of disparities in a stereoscopic image that the first individual user can comfortably fuse, and corresponds to a range of apparent depths in the stereoscopic image that the first individual user can comfortably view;

b) obtaining a scene disparity map for the input stereoscopic image, wherein the input stereoscopic image includes at least one of a given pair of stereo images or a given three-dimensional (3D) computer graphic model;

c) determining a first aim disparity range for a first customized pair of stereo images responsive to the first stereoscopic image disparity range for the first individual user and the obtained scene disparity map;

d) at least one of generating a ~~frist~~ first customized disparity map responsive to the first aim disparity range for the first individual user or generating first customized rendering conditions for a first three-dimensional (3D) computer graphic model responsive to the first aim disparity range for the first individual user;

e) using a digital image processor to produce a first customized pair of stereo images for subsequent display by using the first customized

disparity map or the first customized rendering conditions for the first three-dimensional (3D) computer graphic model;

f) displaying the first customized pair of stereo images to the first indivudal user on a stereoscopic display device.

g) obtaining customization information including a second stereoscopic disparity range for a second individual user, wherein the second stereoscopic disparity range for the second individual user is the range of disparities in a stereoscopic image that the second individual user can comfortably fuse, and corresponds to a range of apparent depths in the stereoscopic image that the second individual user can comfortably view, the second stereoscopic disparity range being different from the first stereoscopic disparity range;

h) determining a second aim disparity range for a second customized pair of stereo images responsive to the second stereoscopic image disparity range for the second individual user and the obtained scene disparity map;

i) at least one of generating a second customized disparity map responsive to the second aim disparity range for the second individual user or generating second customized rendering conditions for a second three-dimensional (3D) computer graphic model responsive to the second aim disparity range for the second individual user;

j) using a digital image processor to produce a second customized pair of stereo images for subsequent display by using the second customized disparity map or the second customized rendering conditions for the second three-dimensional (3D) computer graphic model, wherein the second customized pair of stereo images are different from the first customized pair of stereo images; and

k) displaying the second customized pair of stereo images to the second indivudal user on a stereoscopic display device.

60. (Currently amended) A stereoscopic display system customized for an individual user's perceptual characteristics for stereoscopic viewing, comprising:

a) a stereoscopic image source adapted to provide different stereoscopic images for each of a plurality of user categories, each user category corresponding to a cluster of users having common perceptual characteristics for

stereoscopic viewing and being characterized by a category-specific stereoscopic disparity range limit, the stereoscopic disparity range limit being the range of disparities in a stereoscopic image that the cluster of users can comfortably fuse, wherein the stereoscopic images for each user category are rendered according to the corresponding category-specific stereoscopic disparity range;

b) a stereoscopic display device; and

c) a data processor for

associating ~~the~~ a first individual user with a first one of the plurality of user categories according to the individual user's perceptual characteristics for stereoscopic viewing;

associating a second individual user with a second one of the plurality of user categories according to the individual user's perceptual characteristics for stereoscopic viewing;

receiving [[a]] first and second stereoscopic images from the stereoscopic image source corresponding to the associated first and second user ~~category~~ categories; ~~and~~

displaying the first received stereoscopic image on the stereoscopic display device for the first user; and.

displaying second received stereoscopic image on the stereoscopic display device for the second user.

61. (Currently amended) The stereoscopic display system of claim 60 wherein the first or second individual user is associated with one of the plurality of user categories by characterizing the individual users's perceptual characteristics for stereoscopic viewing and determining the user category that most closely matches the user's perceptual characteristics for stereoscopic viewing.